UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,145	09/30/2003	Fernando C. M. Martins	884.726US1	3926

21186 7590 08/05/2009
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
RYAN, PATRICK A	

ART UNIT	PAPER NUMBER
2427	

NOTIFICATION DATE	DELIVERY MODE
08/05/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
request@slwip.com

Office Action Summary	**Application No.** 10/677,145	**Applicant(s)** MARTINS, FERNANDO C. M.	
	Examiner PATRICK A. RYAN	**Art Unit** 2427	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2009*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *48 and 54-62* is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *48 and 54-62* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☐ All b)☐ Some * c)☐ None of:
1.☐ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is made in response to Amendment Under 37 CFR 1.116 ("Reply"), filed May 26, 2009. Applicant has amended Claim 48, no claims have been added, and no claims have been canceled. As amended, Claims 48, and 54-62 are presented for examination.

2. In Office action of December 23, 2008 ("Office Action"):

Claims 48 and 56-60 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al., United States Patent Application Publication (2003/0002862 A1) in view of Obrador US Patent (6,585,521 B1) in view of Seki et al., United States Patent Application Publication (2002/0004751 A1.

Claims 54, 55, and 61 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez, Obrador, and Seki in view of Cliff et al US Patent (6,885,304).

Claims 62 was rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Rodriguez, Obrador, and Seki in view of Eldering et al US Patent (7,150,030 B1).

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 26, 2009 has been entered.

Response to Arguments

4. Applicant's arguments, see Reply Pages 4-9, have been fully considered but they are not persuasive.

5. Applicant presents that the combination of Rodriguez and Obrador fails to teach the Claim 48 limitation: "transferring the meta-data from the set-top boxes to the pay-per-view service; the pay-per-view service analyzing the meta-data" because "there is no disclosure in Obrador of transferring meta-data associated with the users' responses to set-top boxes, or transferring the meta-data from set-top boxes to a pay-per-view service" (Reply Pages 5-6). Applicant further presents that "[i]f an indexed multimedia sequence, as generated by the teachings of Obrador, were transmitted to a pay-for-view control center of the type shown in Rodriguez, there is no teaching in either Rodriguez or Obrador of how to receive, process, and utilize such transmission in the context of a pay-per-view system" (Reply Page 6). The Examiner respectfully disagrees.

The Examiner submits that Rodriguez is used to teach a "pay-per-view service" distributing a digital item and collecting (claimed "transferring") transaction histories for digital items consumed by users of the system for billing purposes (Office Action Page 3; with particular reference to Rodriguez Paragraphs [0041,0081]). Obrador is used to teach generating, analyzing, and collecting meta-data that represents a users' response to a digital item (Office Action Page 4; with particular reference to Obrador Col. 3 Lines 36-64).

The Examiner further submits that both Rodriguez and Obrador teach methods of collecting user generated meta-data at a central location. In particular, Rodriguez teaches Billing System 320, as part of Headend 11, for collecting billing information in order to generate a transaction history for a particular user (Paragraph [0081]). Obrador teaches the collection of different viewers' behavior and emotional feedback to a video sequence at Computer 140 of Emotion Detection System 100 (Col. 3 Lines 25-64). It is the Examiner's position that the teachings of Rodriguez and Obrador are similar techniques usable together because both demonstrate the collection and analysis of user generated meta-data associated with multimedia content and that these similar techniques are usable together to provide the benefits of video indexing using meta-data (as Obrador describes in Col. 1 Lines 10-39) in the pay-per-view system of Rodriguez (as presented in Office Action Page 4). The Examiner additionally notes that the Seki reference was not used to address the "transferring…" limitation, as Applicant appears to present in Reply Page 7.

6. Applicant further presents that the combination of Rodriguez, Obrador, and Seki fails to teach the Claim 48 limitations: "the pay-per-view service increasing a cost…" and "…decreasing the cost…" because "Seki fails to disclose anything concerning multimedia or pay-per-view services" (Reply Page 7). The Examiner submits that a

teaching of the distribution of multimedia content using a pay-per-view service is established with the Rodriguez reference (as addressed above).

7. Applicant's remaining arguments are dependent upon the subject matter presented above (Reply Pages 8), therefore the Examiner submits that disputed claim limitations are correctly addressed.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 48 and 56-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al., United States Patent Application Publication (2003/0002862 A1) hereinafter “Rodriguez” in view of Obrador US Patent (6,585,521 B1) in view of Seki et al., United States Patent Application Publication (2002/0004751 A1) hereinafter “Seki”.

10. In regards to Claim 48, Rodriguez teaches a computerized method to adjust a price of a digital item provided to a plurality of set-top boxes by a pay-per-view service (operations of Digital Broadband Delivery System (DBDS) 10 shown in Figs. 1, 2, 3, and 4, with Headend 11 operations introduced in Paragraph [0050] and Digital Home Communication Terminal (DHCT) 16 introduced in Paragraph [0061]; with further reference to pay-per-view capabilities discuses in Paragraphs [0041,0069,108-109]. In

addition, the price of Purchasable and Recordable Media (PRM) can be adjusted as a function of the time of day of the request or as a function of demand volume, as discussed in Paragraphs [0102-0106,0111]) comprising:

the pay-per-view service distributing the digital item to the plurality of set-top boxes for viewing by a plurality of users (DBDS 10 delivering broadcast video signals to multiple DHCTs 16, as described in Paragraphs [0040-0041]).

Rodriguez teaches prompting a user to purchase the PRM during the presentation using a pop-up message, as disclosed in Paragraph [0109]. In addition Rodriguez discuses collecting users' transaction history records at the time the PRM is purchased or by polling the users DHCTs periodically, as discussed in Paragraph [0081]. However, Rodriguez does not explicitly teach users generating responses thereto; collecting the users' responses to viewing the digital item on the set-top boxes; generating meta-data associated with the users' responses to the digital item; storing the meta-data from the set-top box to the pay-per-view service; the pay-per-view service analyzing the meta-data.

In a similar field of invention, Obrador teaches a method and system for indexing video based on viewers' behavioral and emotional feedback (Abstract). Obrador uses Emotion Detection System 100 to monitor and detect viewers' responses to a given video sequence, such as by detecting laughter during a given segment and then categorizing the segment as funny (i.e. generating and analyzing meta-data), as discussed in Col. 3 Lines 12-36; with further reference to Blocks 730-740 of Fig. 7, as described in Col. 7 Lines 22-45. In addition, Obrador teaches Remote Storage 150 that

Emotion Detection System 100 can access by way of Network 160 for the purpose of storing the indexed video segments, as discussed in Col. 3 Lines 36-64; with further reference to Fig. 7 Block 770, as discussed in Col. 7 Lines 22-45.

Rodriguez and Obrador teach methods of collecting user generated meta-data at a central location. In particular, Rodriguez teaches Billing System 320, as part of Headend 11, for collecting billing information in order to generate a transaction history for a particular user (Paragraph [0081]). Obrador teaches the collection of different viewers' behavior and emotional feedback to a video sequence at Computer 140 of Emotion Detection System 100 (Col. 3 Lines 25-64). Rodriguez and Obrador are similar techniques usable together because both demonstrate the collection and analysis of user generated meta-data associated with multimedia content. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of delivering subscriber requested video services, such as pay-per-view or video-on-demand to multiple users upon request, as taught by Rodriguez, with the method of indexing video based on viewers' behavioral and emotional responses, as taught by Obrador, because "video indexing allows a user to have easy access to different sections of the video sequence", which would allow a user to more conveniently navigate a video sequence, as Obrador suggests in Col. 1 Lines 10-39.

The combination of Rodriguez and Obrador does not explicitly teach the pay-per-view service increasing the cost of subsequently distributing the digital item to set-top boxes if the users liked it or decreasing the cost of subsequently distributing the digital item to set-top boxes if the users disliked it.

In a similar field of invention, Seki teaches a method and system for managing the retail sales of a product across a communications network (Abstract, Paragraphs [0015-0016]). Seki's method involves adjusting the cost of accessing digital content based on factors such as the popularity or the user evaluation of a product, with reference to Paragraphs [0024-0026, 0065]. Seki further discloses a price setting means to adjust the charge for access to digital content by increasing the cost when the rank of the content increase (i.e. becomes more popular) and by decreasing the cost when the rank of the content decreases (i.e. becomes less popular), as disclosed in Paragraphs [0027-0028]. In addition, the Examiner interprets something that is "liked" to be something that is "popular" and something that is "disliked" to be something that is "unpopular."

Rodriguez teaches a method of adjusting the cost of media, such as pay-per-view content, based on users' demand and network conditions. Obrador teaches a method of establishing a relationship between viewers' emotional responses and a video segment for the purpose of indexing and categorizing the video. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Rodriguez and Obrador with the method of adjusting the cost of digital content proportionally to user ranking, as taught by Seki, in order to increase net profit on popular content and to increase marketing competitiveness on unpopular content, as Seki discuses in Paragraph [0011].

11. In regards to Claim 56, the combination of Rodriguez, Obrador, and Seki teach the method of Claim 48 wherein collecting the users' responses comprises receiving

data representing nonverbal communications of the user (Obrador teaches image sensor 110 of video camera 130 “for capturing facial expressions and physical movement of the viewers”, as disclosed in Col. 3 Lines 43-46, with further reference to Col. 5 Lines 64-67 and Col. 6 Lines 1-26).

12. In regards to Claim 57, the combination of Rodriguez, Obrador, and Seki teach the method of Claim 56 wherein the data representing nonverbal communications comprises data representing facial gestures of the users (Obrador teaches image sensor 110 of video camera 130 “for capturing facial expressions and physical movement of the viewers”, as disclosed in Col. 3 Lines 43-46, with further reference to Col. 5 Lines 64-67 and Col. 6 Lines 1-26).

13. In regards to Claim 58, the combination of Rodriguez, Obrador, and Seki teach the method of Claim 56 wherein the data representing nonverbal communications comprises data representing gazing patterns of the users (Obrador teaches a lack of interest may be indexed if the viewer is not looking at the display, as disclosed in Col. 4 Lines 20-23).

14. In regards to Claim 59, the combination of Rodriguez, Obrador, and Seki teach the method of Claim 48 wherein collecting the users’ responses comprises receiving data representing verbal communications by the users (Obrador teaches audio sensor 120 may be a microphone for capturing an audio signal in the viewer’s voice, as disclosed in Col. 3 Lines 47-49, with further reference to Col. 6 Lines 27-67).

15. In regards to Claim 60, the combination of Rodriguez, Obrador, and Seki teach the method of Claim 59 wherein the data representing verbal communications

comprises data representing speech patterns of the users (Obrador teaches emotion detection system 100 may use audio signals in the viewers' voice, such as laughter to categorize the video segment, as disclosed in Col. 3 Lines 31-36).

16. Claims 54, 55, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez, Obrador, and Seki in view of Cliff et al US Patent (6,885,304) hereinafter "Cliff."

17. In regards to Claims 54 and 55, the combination of Rodriguez, Obrador, and Seki teach the method of Claim 48, but do not teach wherein collecting the users' responses comprises receiving data representing physiological processes of the users, selected from a group consisting of breathing, heart rate, blood pressure, galvanic response, eye movement, and muscle activity of the users.

In a similar field of invention, Cliff teaches a method of monitoring users' reaction to a performance, which includes monitoring a users' body temperature, perspiration, and pulse rate (as disclosed in Col. 6 Lines 6-24).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combined the method of Rodriguez, Obrador, and Seki teach with the method of obtaining a physiological reaction to a performance, as taught by Cliff, because "monitoring of these features can also... allow central determination of whether audience members are at risk of endangering their health" (as disclosed in Col. 6 Lines 25-28). Monitoring the physiological processes of a user would therefore insure the safety and wellbeing of the user.

18. In regards to Claim 61, the combination of Rodriguez, Obrador, and Seki teach the method of Claim 59, but do not teach wherein the data representing verbal communications comprise data representing the users' vocabulary.

In a similar field of invention, Cliff teaches a method of detecting one or more keywords spoken by the user. In Cliff's method, a negative response signal may be produced for one keyword and a positive signal for a different keyword (as disclosed in Col. 5 Lines 55-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combined the method of Rodriguez, Obrador, and Seki teach with the method of obtaining a performance based on a keyword spoken by an individual, as taught by Cliff, because the spoken word would provide a specific reaction of the user and therefore a more accurate interpretation of the user's feelings about the performance can be established.

19. Claims 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Rodriguez, Obrador, and Seki in view of Eldering et al US Patent (7,150,030 B1) hereinafter "Eldering."

20. In regards to Claim 62, the combination of Rodriguez, Obrador, and Seki teach the method of Claim 48, but do not teach wherein collecting the users' responses comprises receiving data representing the users' pattern to browse the digital item.

In a similar field of invention, Eldering teaches a method of monitoring a user's actions, such as the time duration programming is watched and the volume at which the programming is listened. These user inputs are then used to create program characteristics vectors, which can be used in combination with subscriber selection data to form a subscriber profile (Eldering Abstract). Further more, Eldering's method keeps track of the number of channel changes occurring during the viewing time using a channel change record (as disclosed in Col. 7 Lines 44-47).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combined the method of Rodriguez, Obrador, and Seki teach with the method of user input tracking, such as channel change patterns, as taught by Eldering because it is well known in the art that rapid channel changing, or channel surfing, signifies the searching (or browsing) through programs that are not of interest. Therefore, by tracking the input of a user as taught by Eldering, a determination that a user is channel surfing may be established.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICK A. RYAN whose telephone number is (571)270-5086. The examiner can normally be reached on Mon to Thur, 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. A. R./
Examiner, Art Unit 2427
Monday, August 03, 2009

/Scott Beliveau/
Supervisory Patent Examiner, Art Unit 2427